

Serial No. 09/624,051

- 6 -

Art Unit: 2157

REMARKS

This paper is responsive to the Final Office Action dated July 13, 2005 in the above identified application for United States Patent. All rejections and objections of the Examiner are respectfully traversed. Reconsideration and further examination are respectfully requested.

The Examiner rejected claims 1-7, 10-16 and 19-20 as being obvious under 35 U.S.C. 103, citing the article "Active Storage Nets" by David Nagle ("Nagle"), now in combination with United States patent number 6,470,382 of Wang et al. ("Wang et al."). Applicants respectfully traverse this rejection.

As noted previously, Nagle discloses a system in which client systems communicate with one or more network attached storage devices (NASDs) through active routers, and potentially also through one or more active switch and/or active hub devices. One or more Storage Area Networks (SANs) can be used to interconnect the devices through the Nagle system, to provide data transfers between the client systems and the network attached storage devices. As previously recognized, and again noted by the Examiner, Nagle provides no teaching of any system or method that includes encapsulating non-network protocol transactions into network protocol data units.

Wang et al. disclose a system to dynamically attach, manage, and access a LAN-attached SCSI and netSCSI device to a network, in which a broadcast message is sent from the netSCSI device to provide a network address of the netSCSI device, and is received at a computer coupled to the network. Wang et al. further teaches that the network address of the netSCSI device is mapped to a logical SCSI ID in the computer. The computer in Wang et al. then claims

Serial No. 09/624,051

- 7 -

Art Unit: 2157

ownership of the netSCSI device by transmitting a message of ownership to it and including its own network address. Subsequently, communication to the netSCSI device of Wang et al. is performed by accessing the address map. See Abstract. The system of Wang et al. provides a protocol in which to encapsulate data and SCSI commands into a coherent network-compatible packet.

Nowhere in the combination of Nagle and Wang et al. is there disclosed or suggested any system or method for facilitating operations related to data storage between a first device and at least one data storage unit in a computer network, including:

...
processing the at least one network protocol data unit based on a storage services protocol set to facilitate transmission of the at least one network protocol data unit to the at least one data storage unit, wherein the processing is performed at a switch located in the computer network;
...

as in the present independent claim 1. Analogous features are also found in the present independent claim 10. The combination of Nagle and Wang et al. includes no teaching or suggestion of processing at least one network protocol data unit based on a storage services protocol set in a switch located in a computer network, to facilitate transmission of the at least one network protocol data unit to the at least one data storage unit, as in the present independent claims 1 and 10. In contrast, the combination of Nagle and Wang et al. would result in a system in which an active router operates to provide protocol conversion from a LAN to a SAN, as shown and indicated in slide 7 of Nagle. The combination of Nagle and Wang et al. would further not disclose or suggest the present independent claims if it were to include the netSCSI nodes of Wang et al., since those devices transmit only SCSI protocol messages towards the SCSI devices 362, as shown in Fig. 3C of Wang et al., and accordingly cannot be considered

Serial No. 09/624,051

- 8 -

Art Unit: 2157

switches in a computer network. Moreover, Wang et al. includes no mention of a need for network switches or routers of any kind.

Applicants further respectfully urge that the Examiner has not provided a sufficient motivation to combine Nagle and Wang et al., since Nagle teaches away from using encapsulation of storage service protocol transactions. A *prima facie* case of obviousness under 35 U.S.C. 103 must include a showing of a suggestion, teaching or motivation that would have led a person of ordinary skill in the art to combine the cited references *in the particular manner claimed*. See In re Dembiczak, 175 F.3d 994, 998 (Fed. Cir. 1999), and In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000). “[C]ombining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.” Dembiczak, 175 F.3d at 999. In the present case, Nagle teaches away from any use of encapsulation, instead using *protocol conversion* between different network protocols. By teaching a system using protocol conversion, Nagle expressly teaches against a system such as that of Wang et al., which encapsulates SCSI commands into a network compatible packet. A person skilled in the art would accordingly not be motivated to combine Nagle and Wang et al. in the manner of the present independent claims 1 and 10.

For the above reasons, Applicants respectfully submit that the combination of Nagle and Wang et al. does not disclose or suggest all the features of the present independent claims 1 and 10, and that a sufficient motivation to combine the references has not been shown. Accordingly, the combination of Nagle and Wang et al. does not form the basis of a *prima facie* case of obviousness with regard to the present independent claims 1 and 10 under 35 U.S.C. 103. As to claims 2-7 and 11-16, they each depend from claims 1 and 10, and are respectfully believed to be

Serial No. 09/624,051

- 9 -

Art Unit: 2157

patentable over the combination of Nagle and Wang et al. for at least the same reasons. Claims 19 and 20 have been cancelled.

The Examiner also rejected claims 8-9 and 17-18 for obviousness under 35 U.S.C. 103, again citing the combination of Nagle and Wang et al., and further citing sections from Chapter 7 of "Security in Computing" by Pfleeger ("Pfleeger"). Applicants respectfully traverse this rejection.

As noted previously, Pfleeger describes the principles underlying design of trusted operating systems, and lists auditing and logging within the security features of trusted operation systems. Like Nagle and Wang et al., Pfleeger includes no disclosure or suggestion of any system or method for facilitating operations related to data storage between a first device and at least one data storage unit in a computer network, including:

...
processing the at least one network protocol data unit based on a storage services protocol set to facilitate transmission of the at least one network protocol data unit to the at least one data storage unit, wherein the processing is performed at a switch located in the computer network;
...

as in the present independent claims 1 and 10, from which claims 8-9 and 17-18 depend. The Pfleeger reference is not directed towards providing storage information over a network, and does not present solutions specific to moving storage transactions through disparate protocols in a networked environment.

For the above reasons, Applicants respectfully urge that the combination of Nagle, Wang et al. and Pfleeger does not disclose or suggest all the features of the present independent claims 1 and 10, from which claims 8-9 and 17-18 depend. Accordingly, the combination of Nagle,

Serial No. 09/624,051

- 10 -

Art Unit: 2157

Wang et al. and Pfleeger does not support a *prima facie* case of obviousness under 35 U.S.C. with regard to the present independent claims 1 and 10. As claims 8-9 and 17-18 depend from claims 1 and 10, they are respectfully believed to be patentable over the combination of Nagle, Wang et al. and Pfleeger for at least the same reasons.

Reconsideration of all pending claims and withdrawal of all rejections are respectfully requested.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone David A. Dagg, Applicants' Attorney at 617-630-1131 so that such issues may be resolved as expeditiously as possible.

For these reasons, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

October 28 2005
Date

David A. Dagg
David A. Dagg, Reg. No. 37,809
Attorney/Agent for Applicant(s)
Steubing McGuinness & Manaras LLP
125 Nagog Park Drive
Acton, MA 01720
(978) 264-6664

Docket No. 120-221